wha	Date	Topic	Sub-Topic	Duration(Hrs.)
			· Widely used functions range, xrange, enumerate, iter, map, filter and reduce and lambda functions.	
			· List, dictionary and set comprehensions in Python.	
			· Iterators and generators	
			· Descriptors	
			· Decorators	
			· Functions, Modules(package), File handling, Exceptions	
			· Remote host/device connectivity using paramiko.	
			· Python debugging through some of popular IDEs (e.g., PyCharm, VS Code)	
			· File handling of commonly used file types such as JSON, CSV, XML, etc. including how to modify content.	
			· Python subprocess module discussion	
			· Threading concepts	
Day 1 to 3	12 Jan to 14 Jan	Review of key concepts	· Virtual environment	24
	15-Jan	**Pongal Holiday / Sankranti**		
			· Introduction to OOPs	
			· Understanding Classes & Objects	
			· Parameterized Methods	
			· Constructors & Destructors	
			· Class types	
			· Introduction to Inheritance	
			· Types of Inheritance	
			· Introduction to Polymorphism	
Day 4 and 5	16 Jan and 19 Jan	Python OOPS	· Polymorphism on Operators	16
			· Match and search functions	
			· Regular expression patterns	
			· Special sequences	
			· Meta-characters	
			· Assertions	
Day 6	20-Jan-26	Regular Expressions	· Regular expression modifiers	8
		Milestone 1 - 21 Jan - MCQ + Coding		
			· API introduction	
			· HTTP verbs	
			· REST principles	
			· Building a simple Flask web server application	
			· Create application end points.	
			· Test API using Postman tool	
			Working with Web & APIs	
			· For automation or web interaction.	
			· requests library (GET, POST, headers)	
			· Parsing HTML (BeautifulSoup, lxml)	
			· JSON parsing and serialization	
			· Basics of REST API	
Day 7 and 8	21 Jan to 22 Jan	Building and testing REST APIs		16
			· Introduction to automation frameworks in Python	
			· Unit testing	
			· Test driven development	
Day 9	23-Jan-26	Test Automation Frameworks	· Setting up the development environment	8
		26 Jan 2026 - Republic Day (holiday)		
			· Pytest overview	
			· Test discovery	
			· xUnit style setup and teardown	
			· Test fixtures	
			· Conftest.py	
			· Parameterizing tests	
			· Assert statements and exceptions.	
			· Pytest command line arguments	
			· Customizing tests with command line and configuration files	
			· Handling skips and expects failures.	
			· Distributed and parallel tests	
			· Reporting test results and tracking test history	
			· Writing and running unit tests	
Day 10 and 11	27 Jan to 28 Jan	Pytest	· Writing functional tests	16
			· Introduction to Robot framework	
			· Instructions to setup the environment and relevant packages	
			· Robot Framework - RIDE, Writing Simple test case using RIDE.	
			· Keyword and Data Driven Test Cases, writing and executing Test Cases	
			· Working with Command Line, Test setup and teardown	
			· Working with Browsers Using Selenium Library, Text Box, Radio Button, Check Box, Radio Button, Drop Down,	
Day 12 to 14	29 Jan to 30 Jan and 2 Feb	Robot framework	· Working with built in Library	24
		Milestone 2 - 3 Feb - MCQ + Use Case		
			· Introduction and flavours of Selenium	
			· Selenium IDE	
			· Locators and object identifiers	
			· Selenium web driver introduction	
			· Handling different controls on web pages using web driver	
			· Selenium automation framework	
			· Selenium Grid	
Day 15 to 17	3 Feb to 5 Feb	Selenium Web Driver framework	· Handling iframes, Handling windows, Selenium waits	24
			· Introduction and flavours of Selenium	
			· Selenium IDE	
			· Locators and object identifiers	
			· Selenium web driver introduction	
			· Handling different controls on web pages using web driver	
			· Selenium automation framework	
			· Selenium Grid	
Day 18 to 19	6 Feb and 9 Feb	Selenium Web Driver framework	· Handling iframes, Handling windows, Selenium waits	16
			· NumPy, Pandas (data manipulation)	
			· Dataframes	
			· Matplotlib, Seaborn (data visualization)	
			· OpenPyXL / Pandas	
Day 20 and 21	10 Feb to 11 Feb	Data & Automation		12
			· Database connectivity for popular SQL/NoSQL DBs (MySQL, MangoDB)	
Day 22	12-Feb-26	Data manipulation and Analysis	· Popular Data analysis, processing modules like NumPy, Pandas	8
			· Threading (I/O-bound tasks)	
Day 23	13-Feb-26	Concurrent Execution	· Multiprocessing (CPU-bound tasks)	8
Day 24	16-Feb		**Capstone**	8
Day 25	17-Feb		**Final Assessment - 18 Feb - MCQ**	8
Day 26	18-Feb		**Capstone**	8
Day 27	19-Feb		**Capstone**	8
Day 28	20-Feb		**Capstone**	8
Day 29	23-Feb		**Capstone**	8
Day 30	24-Feb	Capstone	**Capstone**	8
			Total Duration in hours	236
			Duration in days	30

Note column (Day 15 to 19, Selenium Web Driver framework):

Include modules
How To Inspect Elements On Different Browsers - 1hr 3m
Selenium WebDriver Setup and Installation - 2m
Selenium WebDriver Running Tests on Various Browsers - 1hr 13m
Selenium WebDriver - Finding Elements - 1hr 1m
Cascading Style Sheets (CSS) Selectors - Advanced Locators - 39m
XPath - Advanced Locators - 59m
Selenium WebDriver - Working with WebElements - 1hr 45m
Selenium WebDriver - Useful Methods and Properties - 51m
Selenium WebDriver - Wait Types - 46m
Selenium WebDriver Advanced Interactions - 1hr 27m
Selenium WebDriver - File Upload And Download - 20m
Selenium WebDriver - Switch Window and iframes - 43m
Selenium WebDriver - Working with Actions Class - 24m
from Selenium WebDriver With Python 3.x - Novice To Ninja [Updated] course